Decreasing Morbidity/Mortality from the Leading Causes of Death

Seven of every 10 Americans--1.5 million people--who die each year die from a chronic disease. Heart disease and cancer account for almost two-thirds of all deaths in the United States. The other leading causes of death, in order of rank, are unintentional injury, stroke, chronic obstructive pulmonary diseases, pneumonia and influenza, diabetes mellitus, HIV/AIDS, suicide, and chronic liver disease and cirrhosis. The overall rankings of the leading causes of death vary between the Nation, State, and the New River Health District. While heart disease and cancer were consistently ranked first and second as the leading causes of death in 1995, unintentional injury ranked as the third leading cause of death for both the United States and the New River Health District. For the State of Virginia, cerebrovascular disease deaths ranked as the third leading cause of death in 1995. The 1995 mortality rates for the leading causes of death in for the United States, Virginia, and the New River Health District are reflected in the chart on the following page.

Leading causes of death in the United States differ among age groups. In 1995, the leading cause of death in youth from birth to age 24 was unintentional injury; and among the 25-44 age group, HIV/AIDS was the leading cause of death. In the 45-64 age group, cancer was leading cause of death, with lung cancer being the leading site of cancer for both men and women. Prostate cancer was the second leading cause of cancer death in men; and breast cancer was the second leading cause of cancer death in women. Heart disease was the leading cause of death among those age 65 and older. The following chart compares 1995 death rates for the leading causes of death by age groups in the United States.

Leading Causes of Death and Death Rates by Age Group Per 100,000 Population
United States
1995

Age Group	Leading Causes of Death and Death Rates Per 100,0		
	Unintentional Injury		
Under 1 Year	20.5		
Ages 1-4	14.5		
Ages 5-14	9.3		
Ages 15-24	38.5		
	HIV/AIDS		
Ages 25-34	29.1		
Ages 35-44	44.4		
	Cancer		
Ages 45-54	142.2		
Ages 55-64	416.0		
	Heart Disease		
Ages 65 –74	2,929.0		
Ages 75-84	6,496.6		
Ages 85 and above	14,962.4		

Source: Monthly Vital Statistics Report, Centers for Disease Control and Prevention, Vol. 45, No. 11, October 1997.

Currently, most of the leading causes of death, as listed on death certificates, are chronic diseases. However, the actual causes of most of these deaths can be attributed to modifiable risk factors. It is estimated that these risk factors account for 50% of all deaths in the United States. Behaviors such as smoking, using illicit drugs, misuse of alcohol, eating a diet that causes an elevated cholesterol level, and inactivity are underlying causes of many preventable diseases.

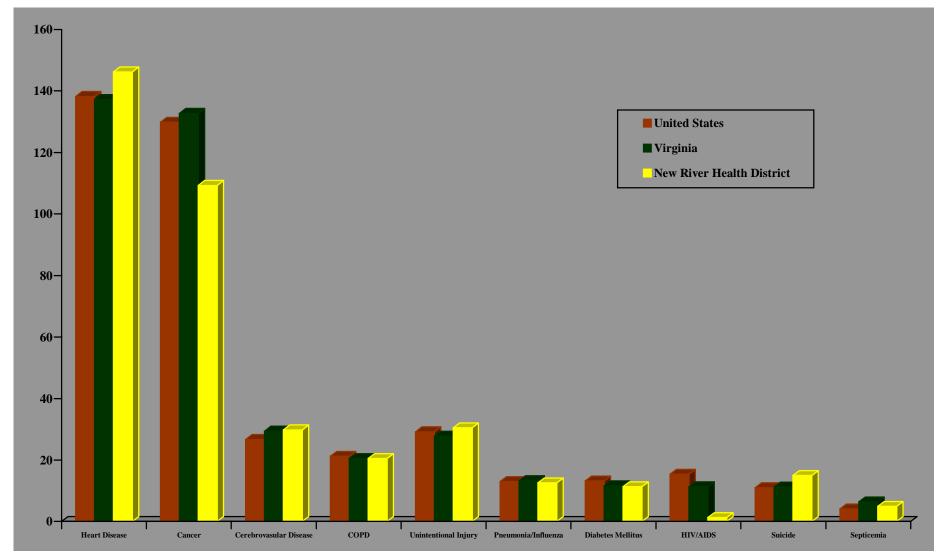
Many diseases are preventable. Public health interventions can substantially decrease and, in some cases, prevent these serious health problems. The following table demonstrates the results of a 1990 study that observed the actual causes of death in the United States in relation to the behaviors that may eventually lead to death.

Actual Causes of Death United States 1990

Cause	Estimated Number of Deaths	Percentage of Total Deaths
Tobacco	400,000	19
Diet/Activity Patterns	300,000	14
Alcohol	100,000	5
Microbial Agents	90,000	4
Toxic Agents	60,000	3
Firearms	35,000	1
Sexual Behavior	30,000	1
Motor Vehicles	25,000	1
Illicit Use of Drugs	20,000	<1
TOTAL	1,060,000	50

Source: Journal of the American Medical Association, 270:2207-2212, 1993.

The Ten Leading Causes of Death with Age-Adjusted Rates Per 100,000 Population United States, Virginia, New River Health District 1995



Sources: *Monthly Vital Statistics Report*, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997. *Virginia Health Statistics 1995*, Center for Health Statistics, Virginia Department of Health, January 1997.

Heart Disease

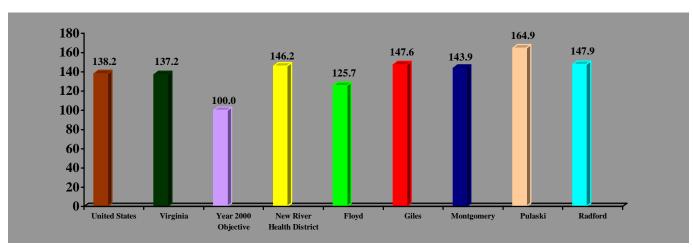
Many risk factors influence an individual's risk for heart disease. Individuals have little control over certain risk factors such as genetic predisposition, gender, and advancing age. However, most risk factors for coronary heart disease are associated with modifiable factors including diet, exercise, smoking, blood cholesterol levels, blood pressure, excessive body weight, stress, and proper health education.

Mortality rates for heart disease have declined in recent years. Despite this progress, coronary heart disease continues to be the leading cause of death. Approximately 500,000 Americans die each year from heart disease, and an additional 7 million are affected by the disease annually. Heart disease costs the Nation approximately \$43 billion per year in direct and indirect costs.

Objective: Reduce coronary heart disease deaths to no more than 100 per 100,000 population.

The leading cause of death in Virginia is heart disease. Thirty percent (30%) of all resident deaths recorded in 1995 were attributable to this factor. In 1995, Virginia's age-adjusted death rate for heart disease was 137.2 per 100,000 people. This rate was similar to the 1995 rate for the Nation (138.2) and was significantly higher than the Year 2000 Objective rate of no more than 100 deaths per 100,000 population. In the New River Health District, the 1995 age-adjusted death rate from coronary heart disease (146.2.) was significantly higher than that of the Nation (138.2) or the State (137.2). The highest rates were in Pulaski County (164.9), Radford City (147.9), and Giles County (147.6). The lowest reported heart disease death rate in 1995 was reported in Floyd County (125.7). The following chart compares heart disease age-adjusted death rates of the United States, Virginia, Year 2000 Objective, and New River Health District and its localities.

Heart Disease Age-Adjusted Death Rates Per 100,000 Population United States, Virginia, Year 2000 Objective, New River Health District and Localities 1995



Sources: Monthly Vital Statistics Report, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997.
Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.
Healthy People 2000, U.S. Department of Health and Human Services, 1990.

According to preliminary data, the New River Health District had an age-adjusted heart disease death rate of 138.8 per 100,000 population in 1996. For that year, Giles County had an age-adjusted heart disease death rate of 175.6; followed by Pulaski County with a rate of 155.8; Montgomery County with a rate of 131.1; Floyd County with a rate of 126.5; and Radford City with a rate of 83.7.

The reporting of death rates for heart disease does not truly reflect the incidence and burden of heart disease in the New River Health District. Virginia law does not require that physicians and hospitals report heart disease cases, and therefore, it is not possible to have a true number of how many people actually suffer from heart disease in any given area of the State.

The New River Health District needs improvement in reducing the number of heart disease deaths. Although Floyd County has the lowest heart disease age-adjusted death rate for the District, the county is still well above the Year 2000 Objective. Pulaski County has a rate that is over 60% higher than the Year 2000 Objective. Residents and professionals who live and work in our communities should begin to look closely at immediate interventions that can reduce the incidence of heart disease.

What you can do:

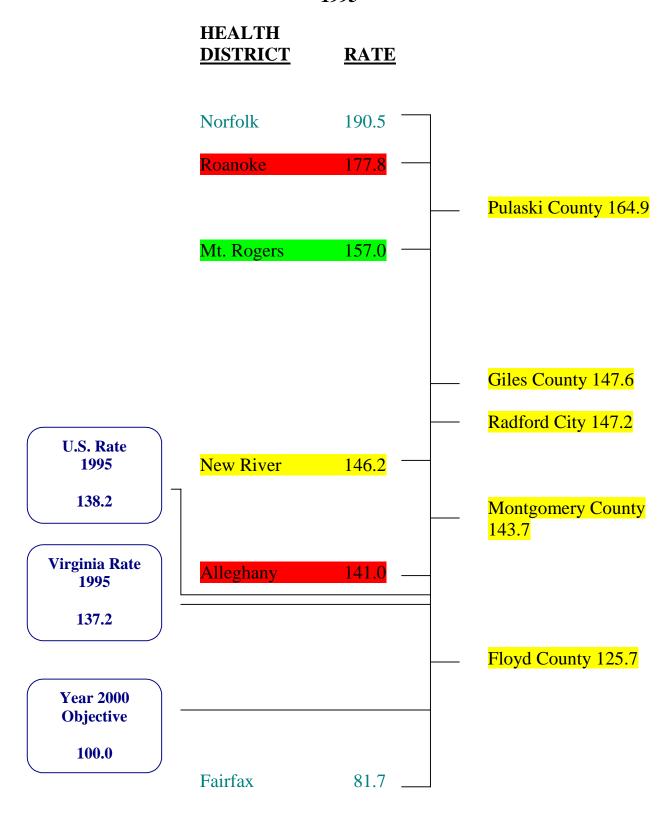
- □ Eat foods low in fat, especially saturated fat. Pay attention to food labels and choose foods that are low in fat. Consume fast foods only in moderation. Select food according to the food-guide pyramid.
- □ **Eat foods low in sodium.** Pay attention to food labels and choose foods that are low in sodium. Canned soups, vegetables, vegetable juices, snack foods, luncheon meats, hot dogs, and most foods from fast food restaurants are examples of high sodium foods. Do not cook with salt and remove the salt shaker from the table.
- □ **Exercise regularly.** Three 30-minute exercise periods per week can be beneficial for most people. Even if you are not able to exercise for 30 minutes at one time, small amounts of physical activity that total an accumulated 30 minutes a day can be helpful.
- □ **Maintain a healthy weight and body composition.** Regular exercise and a healthy diet will assist you in maintaining a healthy weight. Adding a simple weight-training program helps to reduce your amount of body fat and increases muscle.
- □ Control your cholesterol level. Maintaining a healthy lifestyle as previously described will assist you in maintaining a good cholesterol level. Those who have a high cholesterol level should contact their physician for advice and possible drug treatment.
- □ **Be tobacco-free.** Nicotine, found in cigarettes, cigars, snuff, and chewing tobacco, increases a person's blood pressure, heart rate, the amount of blood pumped by the heart, and the blood flow in the arteries of the heart. Also, it can cause the arteries in the arms and legs to narrow. Cigarette smoke also contains carbon monoxide which reduces the amount of oxygen available to the heart. Smoking also causes blood platelets in the blood to become sticky and cluster, decreases clotting time, and increases blood thickness.

- □ **Learn stress management techniques.** Take a class or read about ways to control the symptoms of stress. Find what is right for you and practice!
- □ **Learn the early warning signs of heart attack.** The warning signs of a heart attack are:
 - ➤ Uncomfortable pressure, fullness, or squeezing chest pain or discomfort that lasts more than a few minutes.
 - Pain that spreads to the shoulders, neck, or arms.
 - Lightheadedness, fainting, sweating, nausea, or shortness of breath.

If you have a warning sign of a heart attack, call the rescue squad immediately. If you can get to the hospital faster by car, have someone drive you.

Not all of these signs occur in every attack. Sometimes they subside and return. Prompt attention can reduce the risk of a fatal heart attack. Early intervention in heart disease prevents premature deaths and disability.

Heart Disease Age-Adjusted Death Rates Per 100,000 Population Selected Health Districts, New River Health District and Localities 1995



Cancer

Cancer is not a single disease but actually a constellation of more than 100 different diseases, each characterized by the uncontrolled growth and spread of cells. Cancer accounts for one out of every five deaths in the United States. It is the second leading cause of death in Virginia, accounting for almost one out of four mortalities each year and claiming 12,510 Virginia residents as its victims in 1995. It is a disease that strikes more frequently with advancing age, but may occur at any age.

Some of our communities have expressed concern that they have a higher rate of cancer as compared to other communities, but no evidence has yet shown this to be conclusive. A "cancer cluster" is the occurrence of a greater than expected number of cancer cases within a group of people, a geographic area, or during a certain period of time. A true cancer cluster is more likely to involve a large number of one type of cancer, a rare type of cancer rather than a common type, or an unusual number of a certain type of cancer within a certain age group. Several types of cancer, which occur in a group of people or within a geographic area, do not generally constitute a cancer cluster.

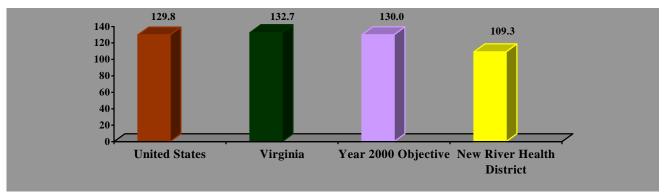
Lifestyle, environments, and genetic factors, individually or in combination, can increase a person's risk of developing cancer. Dietary modifications and reduction of tobacco use appear to be the most promising strategies to achieve long range improvement levels. In addition, early detection and intervention activities can reduce the number of deaths for some cancers.

Objective: Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 population.

Virginia and the United States had similar cancer age-adjusted death rates in 1995. For that year, Virginia had a death rate of 132.7 per 100,000 population and the United States had a rate of 129.8. In 1995, the New River Health District had a cancer age-adjusted death rate (109.3) that was significantly lower than the overall State and national rate for that year. Although no locality within the New River Health District had a 1995 age-adjusted death rate from cancer that was significantly higher than the State or national average, two localities had a rate slightly above the average rate. Localities in the New River Health District with the highest cancer age-adjusted death rates from all types of cancer in 1995 were Giles County (135.9) and Radford City (134.2). Floyd County had the lowest 1995 age-adjusted death rate from cancer (72.6).

The following graph describes the cancer age-adjusted death rates for the United States, Virginia, Year 2000 Objective, and the New River Health District for 1995. The 1995 age-adjusted death rates for cancer by specific type and locality were not accessible at the time of this publication.

Cancer Age-Adjusted Death Rates Per 100,000 Population United States, Virginia, Year 2000 Objective, New River Health District 1995



Sources: Monthly Vital Statistics Report, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997.
Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.
Healthy People 2000, U.S. Department of Health and Human Services, 1990.

According to preliminary data, the New River Health District had a cancer age-adjusted death rate of 120.4 per 100,000 population in 1996. For that year, Giles County had a cancer age-adjusted death rate of 151.7; followed by Radford City with a rate of 148.1; Pulaski County with a rate of 127.6; Montgomery County with a rate of 108.4; and Floyd County with a rate of 79.2.

It is desirable for any community to decrease the number of deaths from cancer, and the New River Health District has achieved the Year 2000 Objective by having a death rate that is lower than the proposed goal. Giles County and Radford City have not met the Year 2000 Objective and need improvement in order to accomplish this Objective. In 1995, Floyd, Montgomery, and Pulaski counties had already surpassed the Year 2000 Objective and appear to be "above average" in achieving lower death rates from cancer. Increased access to prevention and education efforts, along with improved access to early detection activities and facilities throughout the New River Health District, should contribute to a continued downward trend in cancer death rates.

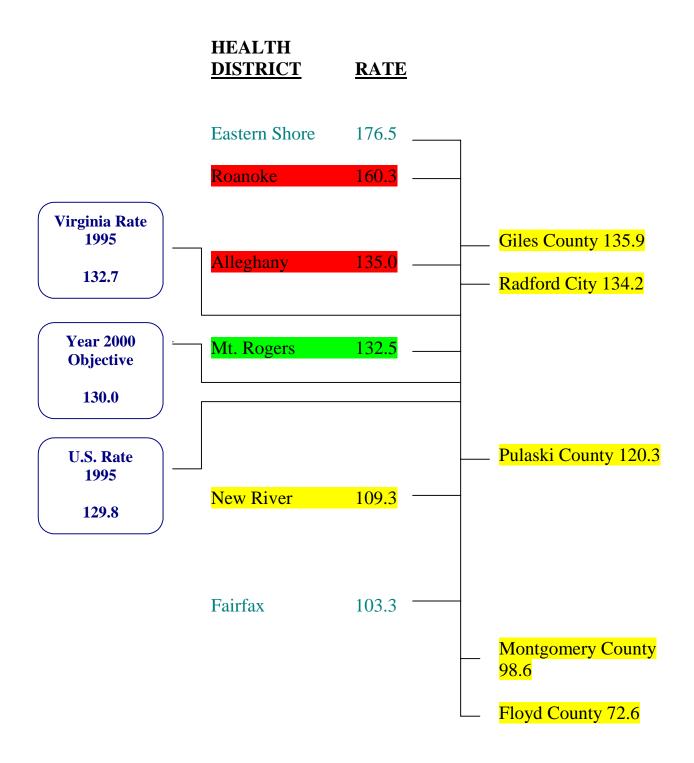
What you can do:

- □ **Learn the early warning signs of cancer.** Some types of cancer can be cured if found in its earliest stages. The American Cancer Society's basic warning signs of cancer spell "caution":
 - > Change in bowel or bladder habits.
 - ➤ **A** sore that does not heal.
 - ➤ Unusual bleeding or discharge.
 - > Thickening or lump in the breast or elsewhere.
 - > Indigestion or difficulty in swallowing.
 - > Obvious change in a wart or mole.
 - > Nagging cough or hoarseness.

If you have any of these warning signs, see your doctor!

- □ Find out about tests and examinations that can detect cancer in its earliest stages. Maintain a regular schedule of early detection examinations and tests as recommended by your physician or dentist. You can obtain information on these tests and when you should have them at your physician's office, your local health departments, or the American Cancer Society.
- **Be tobacco-free.** Smoking is associated with more than 30% of cancer deaths. It is associated with cancer of the lungs, mouth, throat, pancreas, cervix, kidney, and bladder. If you currently smoke, make an effort to quit, either on your own or with the help of counseling or a smoking cessation class. Smokeless tobacco is also associated with cancer of the gum, pharynx, esophagus, and stomach.
- □ **Eat a healthy diet.** Some studies suggest that people whose diet includes a high proportion of fruits, vegetables, grains, and other foods that contain fiber may have a lower risk of certain types of cancer. Conversely, those who eat a diet that is high in fat have a higher risk for certain types of cancer.
- □ **If you drink alcohol, drink in moderation.** High alcohol consumption is associated with several different types of cancer.

Cancer Age-Adjusted Death Rates Per 100,000 Population Selected Health Districts, New River Health District and Localities 1995



Unintentional Injury

Unintentional injury death is death that occurs as a result of an accident and is not associated with a willful act of another individual. The classification of unintentional injury deaths addresses a variety of different categories. This includes deaths from falls, fires, poisonings, motor vehicle accidents, drowning, choking, head injuries, spinal cord injuries, sports, and roadway injuries.

In recent years, unintentional injury has begun to receive long overdue attention as a major public health problem. Nationally, motor vehicle crashes rank first as the leading cause of unintentional injury and account for approximately half of all deaths from unintentional injuries. Falls rank second, followed by poisoning, drowning, and residential fires. Most injuries are predictable and potentially preventable by using basic public health prevention practices. Some of the major originating factors that surround unintentional injury deaths include inappropriate use of alcohol and drugs, lack of safety education and knowledge, and lack of governmental and business safety protection and prevention.

Although unintentional injuries claim more lives than chronic or infectious diseases in the first four decades of life and are among the leading causes of death in Virginia, injury prevention and safety is not currently a required health education topic in Virginia's public schools.

Objective: Reduce deaths caused by unintentional injuries to no more than 29.3 per 100,000 population.

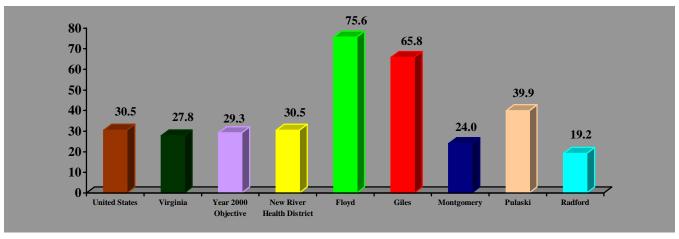
In 1995, 89,705 residents of the United States died of unintentional injuries. The national rate for that year was 35.5 per 100,000 population. Unintentional injuries took the lives of 2,170 Virginians in 1995, making this Virginia's fifth leading cause of death. Virginia, with a rate of 27.8 from unintentional injuries in 1995, had already met its objective for the year 2000. However, the State must continue to facilitate continued progress in keeping this rate below the proposed objective. Motor vehicle crashes account for approximately 40% of unintentional fatalities in Virginia, with falls, accidental discharge of firearms, poisoning, drowning, and fires also claiming a significant number of lives.

Unintentional injuries were the third leading cause of death in the New River Health District in 1995, with 59 individuals dying from this cause. In the New River Health District, the age-adjusted death rate for unintentional injuries in 1995 was 30.5 per 100,000 population. Floyd and Giles more than doubled the District, State, and national rates for unintentional injury deaths. Floyd County had a rate of 75.6 for that year, and Giles County had a rate of 65.8. Pulaski County also had a significantly higher unintentional injury death rate (39.9) than the State, Nation, or the New River Health District for that year. In 1995, Radford City had the lowest unintentional injury age-adjusted death rate in the New River Health District (19.2).

Approximately 46% of these deaths occurred as a result of motor vehicle accidents. Two counties in the New River Health District had death rates well above the 1995 death rates from motor vehicle accidents for the Nation (16.5), the State (13.6), and the New River Health District (17.2). Floyd County had a rate of 32.7 in 1995, and Giles County had a rate of 36.9 for that year. With a rate of 26.2, Pulaski County was also well above the national, State, and the New River Health District rates for that year. The lowest motor vehicle death rates for that year were in Montgomery County (6.5) and Radford City (18.0).

The following graph compares the 1995 unintentional death rates for the United States, Virginia, the Year 2000 Objective, and the New River Health District and its localities.

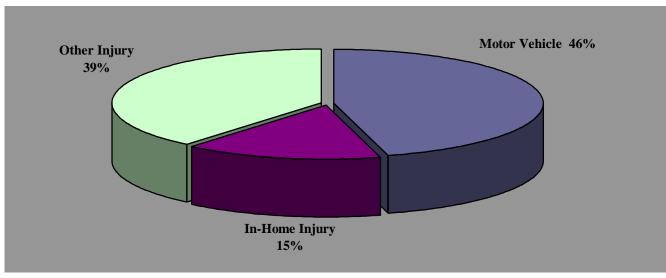
Unintentional Injury Age-Adjusted Death Rates Per 100,000 Population United States, Virginia, Year 2000 Objective, New River Health District and Localities 1995



Sources: Monthly Vital Statistics Report, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997.
Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.
Healthy People 2000, U.S. Department of Health and Human Services, 1990.

The following graph compares the 1995 unintentional injury death rates by cause for the New River Health District. Note that motor vehicle accidents are responsible for nearly half of all unintentional injury deaths in the New River Health District.

Percentage of Unintentional Injury Deaths by Cause New River Health District 1995



Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

The following table describes the 1995 death rates that are specific to motor vehicle crashes in the Nation, State, and the New River Health District and its localities. In 1995, the New River Health District had a motor vehicle death rate that was slightly higher than the rates for the State or the Nation. Floyd, Giles, and Pulaski counties had motor vehicle death rates that were significantly higher than that of the State, Nation, or the Health District in 1995.

Motor Vehicle Death Rates Per 100,000 Population United States, Virginia, New River Health District and Localities 1995

Location	Rate	Number of Deaths
United States	16.5	41,798
Virginia	13.6	900
New River Health District	17.2	27
Floyd	32.7	4
Giles	36.9	6
Montgomery	6.5	5
Pulaski	26.2	29
Radford	18.0	3

Sources: Monthly Vital Statistics Report, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997. Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

According to preliminary data, the New River Health District had an unintentional injury age-adjusted death rate of 25.3 per 100,000 population in 1996. For that year, Floyd County had an unintentional injury age-adjusted death rate of 61.0; followed by Pulaski County with a rate of 29.5; Giles County with a rate of 23.3; Radford City with a rate of 22.6; and Montgomery County with a rate of 22.0.

Overall, the New River Health District has almost met the Year 2000 Objective for the reduction of unintentional injury deaths. Montgomery County and Radford City receive above average scores for this section. However, Floyd, Giles, and Pulaski counties receive unsatisfactory scores for unintentional injury rates that are significantly higher than the Nation, State, or the New River Health District. These counties could benefit from an increase of safety awareness and prevention activities in their communities.

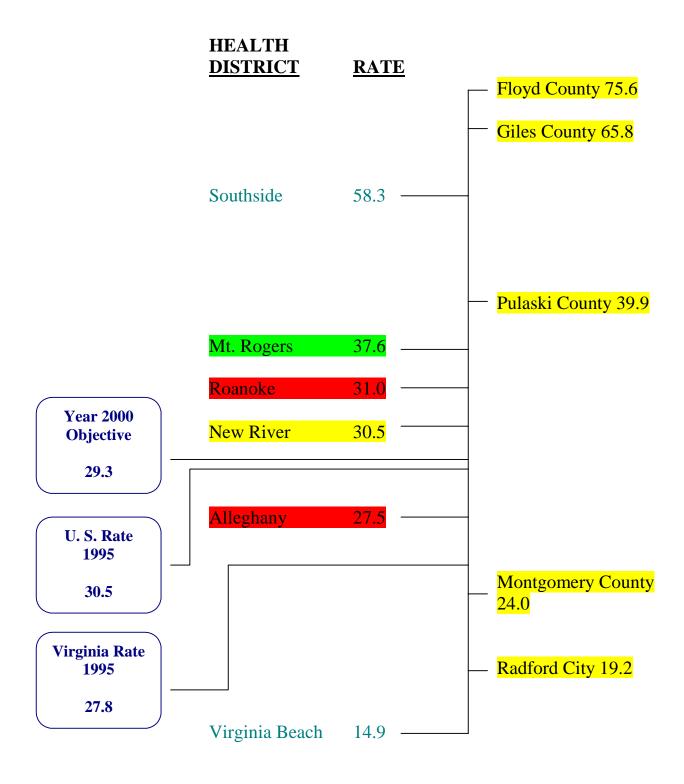
What you can do:

- □ Always wear a seatbelt when you are in a moving vehicle and require any passenger in your car to buckle up.
- □ Carry young passengers in an automobile safety seat. When children are old enough to be out of a safety seat, teach them to wear seatbelts at all times.
- □ **Do not speed.** Speed is the fundamental factor in most vehicle crashes.

- □ **Do not drive while under the influence of alcohol or other drugs.** Refuse to be a passenger of anyone who is driving under the influence of alcohol or drugs. Instead, offer to be the designated driver.
- □ Wear a protective helmet and other appropriate safety gear when riding a bicycle, motorcycle, or other recreational vehicles.
- □ **Teach children pedestrian safety** and encourage your school system to promote pedestrian safety education.
- □ If you do not know how to swim, take a beginner's swimming and water safety course. Children should learn to swim at a young age.
- Do not combine swimming or boating with alcohol or other drugs.
- □ Use a specifically designed pool cover, fence your pool, or use a pool alarm system to prevent pool drownings of children or others.
- □ **Keep a working smoke detector in your home.** Test your detector regularly to assure that it is in good working condition. If you have a battery-operated detector, change the battery at least once a year. When you set your clocks back in the fall and spring of each year, remind yourself to test your smoke detector.
- □ Keep a carbon-monoxide detector in your home, especially if you heat your home with gas, oil, kerosene, wood, or coal.
- □ Have your heating system, including the furnace, flue, and chimneys, inspected every year. A yearly check can detect both leaks and blockages in heating equipment and accessories, which can cause fire or carbon monoxide poisoning.
- □ **Vent heating equipment properly.** Vent woodstoves to the outside. When possible, vent kerosene heaters to the outside. If this is not possible to vent kerosene or gas space heaters to the outside, open a door to the rest of the house and open a window slightly for ventilation.
- □ Choose a woodstove carefully. Choose a properly sized woodstove that is certified to meet EPA emission standards. Make sure all woodstove doors fit tightly. Use aged or cured (dried) wood only; never use pressure treated wood. If you have small children in the home, put up special stove guards to protect them from burns. Follow manufacturer's directions for your woodstove.
- □ **Prepare a fire emergency evacuation plan for your home.** Discuss and practice it with your family.

- □ Use only the back burners on cook stoves if you have small children in your home. This keeps hot pots and pans out of reach and can prevent serious burn injuries to children.
- □ **Keep firearms unloaded and behind locks that are inaccessible to children.** Also, store ammunition separately from firearms.
- □ **Keep poisonous substances out of the reach of children.** This includes medicines and household cleaning products.
- □ **Take precautions to prevent falls in your home.** There are many ways to avoid slips or falls in the home. Among these are avoiding the use of scatter rugs, having adequate lighting in hallways and stairs, having proper safety handrails at stairways and showers, and using safety gates for small children.

Unintentional Injury Age-Adjusted Death Rates Per 100,000 Population Selected Health Districts, New River Health District and Localities 1995



Cerebrovascular Disease (Stroke)

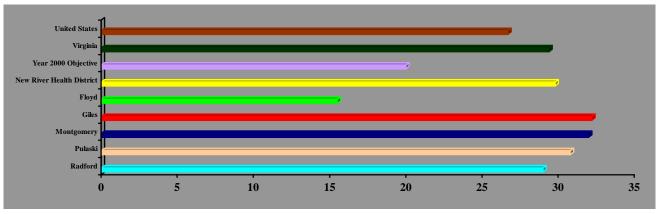
Although the national death rate for strokes has dropped 60% during the past twenty years, Virginia's 1995 death rate from stroke was still higher than the Year 2000 Objective and the United States rate for strokes. Stroke is a major cause of disability that creates severe physical, emotional, and financial hardship for survivors and their families. The major risk factor of all strokes is high blood pressure. People with this condition have up to seven times the risk of experiencing a stroke compared to individuals with normal blood pressure. In addition to high blood pressure, strokes are attributable to many modifiable risk factors such as improper diet, smoking, stress, and lack of exercise. The first steps to modifying these risk factors are proper health education and a commitment to change. Males, African-Americans, persons with diabetes mellitus or atherosclerosis in the carotid artery, those who have had transient ischemic attacks (TIAs), and those with a family history of stroke are also at an increased risk of having a stroke.

Objective: Reduce stroke deaths to no more than 20 per 100,000 population.

Based on statewide surveys conducted for the Behavioral Risk Factor Surveillance System in Virginia, it is estimated that approximately 16% of Virginians between the ages of 18-64 have been told they have high blood pressure. Extrapolating from this data, it is estimated that approximately 18,260 men and women have high blood pressure in the New River Health District.

The stroke age-adjusted death rate for the United States was 26.7 per 100,000 in 1995. Virginia had a stroke age-adjusted death rate of 29.4 for the same year. In 1995, the New River Health District had an age-adjusted stroke death rate of 29.8 per 100,000 population. This was slightly higher than the Year 2000 Objective of 20.0 per 100,000 population. The following charts compare the stroke death rates for the United States, Virginia, the Year 2000 Objective, and the New River Health District and its localities. Note that the highest age-adjusted stroke death rates were reported in the counties of Giles (32.2), Montgomery (32.0), and Pulaski (30.8) and in Radford City (29.0). The lowest age-adjusted death rate from stroke was reported in Floyd County (15.5).

Stroke Age-Adjusted Death Rates Per 100,000 Population United States, Virginia, Year 2000 Objective, New River Health District and Localities 1995



Sources: Monthly Vital Statistics Report, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997.
Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.
Healthy People 2000, U.S. Department of Health and Human Services, 1990.

According to preliminary data, the New River Health District had a stroke age-adjusted death rate of 22.0 per 100,000 population in 1996. For that year, Pulaski County had a stroke age-adjusted death rate of 25.6; followed by Giles County with a rate of 22.0; Montgomery County with a rate of 21.5; Radford City with a rate of 21.4; and Floyd County with a rate of 17.4.

To meet the Year 2000 Objective to reduce stroke deaths to no more than 20.0 per 100,000 population, the New River Health District needs improvement in lowering the death rate from strokes. In the counties of Giles, Montgomery, and Pulaski and Radford City, the death rates from stroke were well above the Year 2000 Objective. Floyd County had the lowest death rate from stroke in 1995 and, therefore, gets a satisfactory score in meeting its Year 2000 Objective. It is important for all residents to continue to prevent stroke deaths by learning about and committing to a healthy lifestyle.

What you can do:

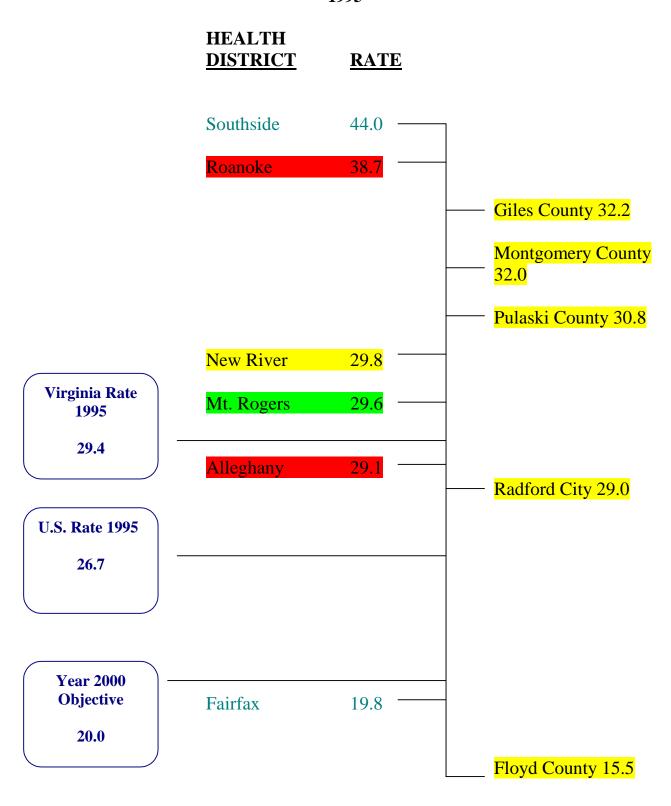
- □ **Have your blood pressure checked.** If you have not had your blood pressure checked lately, contact your physician, local health department, or pharmacy. If you are diagnosed as having high blood pressure, maintain a regular check-up schedule with your doctor.
- □ Comply with your medication schedule for high blood pressure. Do not skip your pills, even if you feel fine. If you have an unpleasant side-affect from your medication, notify your doctor immediately.
- □ **Eat foods low in sodium.** Pay attention to food labels and choose foods that are lowest in sodium. Canned soups, vegetables, vegetable juices, snack foods, luncheon meats, hot dogs, and most foods from fast food restaurants are examples of high sodium foods. Do not cook with salt and remove the salt shaker from the table.
- □ Eat foods low in fat, especially saturated fat. Pay attention to food labels and choose foods that are lowest in fat. Eat fast foods only in moderation. Selecting food according to the food-guide pyramid is a good way to start.
- □ Maintain a healthy weight and body composition. Regular exercise and a healthy diet will assist you in maintaining a healthy weight. Adding a simple weight-training program helps to reduce your amount of body fat and increases muscle.
- □ Control your cholesterol level. Maintaining a healthy lifestyle as previously described will assist you in maintaining a good cholesterol level. Those who have high cholesterol level should contact their physician for advice and possible drug treatment.
- □ **Be tobacco-free.** Nicotine, found in cigarettes, cigars, snuff, and chewing tobacco, increases a person's blood pressure, heart rate, the amount of blood pumped by the heart, and the blood flow in the arteries of the heart. Also, it can cause the arteries in the arms and legs to narrow. Cigarette smoke also contains carbon monoxide which reduces the amount of oxygen in the blood. Smoking also causes blood platelets in the blood to become sticky and cluster, decreases clotting time, and increases blood thickness.

- □ **Drink alcohol only in moderation.** Drinking more than two drinks a day can raise your blood pressure. Binge drinking can lead to a stroke.
- □ **Do not abuse drugs**. Intravenous drug abuse carries a high risk of stroke from cerebral embolisms. Cocaine use also has been linked to stroke, even in first-time users.
- □ **Learn stress management techniques.** Take a class or read about ways to control the symptoms of stress. Find what is right for you and practice!
- □ **Learn the signs of a stroke**. Early intervention for someone who is having a stroke can save a life. The signs of stroke are:
 - > Feeling weak or numb on one side;
 - ➤ Blurry vision, or no vision, usually in one eye;
 - ➤ Inability to talk clearly;
 - > Dizziness or falling; and
 - > Severe headache.

If you have the signs of a stroke, call the rescue squad immediately, or if it is faster to have someone drive you, drive to the nearest hospital emergency room immediately.

In addition, transient ischemic attacks, also known as TIAs or temporary strokes, have the same symptoms as a stroke. The symptoms occur rapidly and last from a few minutes to several hours. Since the symptoms of TIA often precede a stroke, any symptoms should be reported to your doctor immediately.

Cerebrovascular Disease (Stroke) Age-Adjusted Death Rates Per 100,000 Population Selected Health Districts, New River Health District and Localities 1995



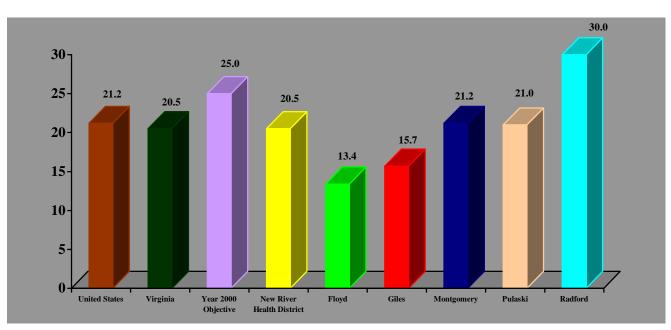
Chronic Obstructive Pulmonary Disease (COPD)

Chronic obstructive pulmonary disease (COPD) is characterized by permanent obstruction of airflow to the lungs. It is an incurable disease in which the lungs are able to take in less air as time progresses. Cigarette smoking is attributable to 82% of deaths from this disease. Other lifestyle factors including lack of exercise and exposure to air pollution also contribute to COPD.

Objective: Slow the rise in deaths from chronic obstructive pulmonary disease to achieve a rate of no more than 25 per 100,000 population.

The 1995 age-adjusted death rate from COPD for the United States was 21.2 per 100,000 population. Both Virginia and the New River Health District had an age-adjusted death rate of 20.5 for that year. COPD is the fifth leading cause of death in the New River Health District. Within the New River Health District, the highest 1995 age-adjusted death rates from COPD were reported in Radford City (30.0), Montgomery County (21.2), and Pulaski County (21.0). The following graph illustrates the 1995 age-adjusted death rates from COPD for the United States, Virginia, the Year 2000 Objective, and the New River Health District and its localities.

COPD Age-Adjusted Death Rates Per 100,000 Population United States, Virginia, Year 2000 Objective, New River Health District and Localities 1995



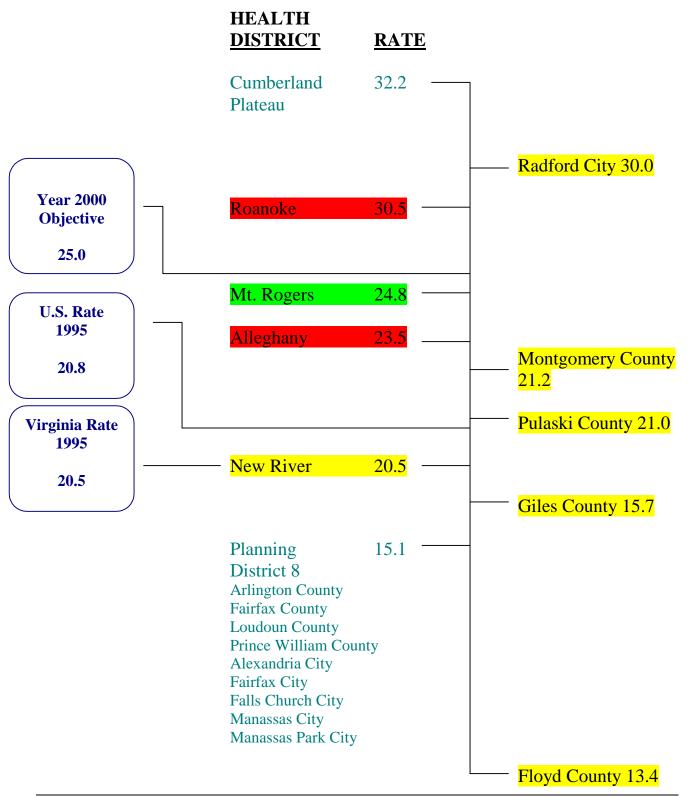
Sources: *Monthly Vital Statistics Report*, Vol. 45, No. 11, Centers for Disease Control and Prevention, October 1997. *Virginia Health Statistics 1995*, Center for Health Statistics, Virginia Department of Health, January 1997. *Healthy People 2000*, U.S. Department of Health and Human Services, 1990. According to preliminary data, the New River Health District had a COPD age-adjusted death rate of 19.1 per 100,000 population in 1996. For that year, Floyd County had a COPD age-adjusted death rate of 21.4; followed by Montgomery County with a rate of 19.2; Pulaski County with a rate of 19.1; Giles County with a rate of 17.7; and Radford City with a rate of 16.8.

As of 1995, the New River Health District is fortunate to have accomplished the Year 2000 Objective of slowing the rise of deaths from Chronic Obstructive Pulmonary Disease (COPD). Radford City needs improvement in decreasing its number of deaths from COPD and should begin to look at intervention strategies that could reduce the incidence of and death rates from COPD.

What you can do:

- □ **Do not smoke.** If you currently smoke, make an effort to quit either on your own or with the help of counseling or a smoking cessation class.
- □ **Maintain an active lifestyle**. Exercise at least 30 minutes a day, at least 3-4 days per week. Even if you are not able to exercise for 30 minutes at one time, small amounts of physical activity to total 30 minutes a day can be helpful.
- □ Avoid living or working in a heavily polluted area, if possible.
- □ If you have Chronic Obstructive Pulmonary Disease, maintain a regular treatment schedule with your doctor. Become educated about your condition and learn the best ways to manage the disease.

Chronic Obstructive Pulmonary Disease Age-Adjusted Death Rates Per 100,000 Population Selected Health Districts, New River Health District and Localities 1995



Summary

If the Year 2000 Objectives that address the leading causes of death are to be met, the New River Health District needs improvement in several areas of prevention.

In 1995, all localities in the New River Health District had age-adjusted death rates for heart disease that were significantly above the Year 2000 Objective. For that year, Pulaski had an age-adjusted heart disease death rate that was nearly 70% over the projected objective.

The New River Health District was fortunate to have a 1995 age-adjusted death rate for cancer that was significantly lower than the Year 2000 Objective; however, Giles County and Radford City had death rates that were slightly above the objective.

Age-adjusted unintentional injury death rates need much improvement in many localities if the New River Health District is to meet the Year 2000 Objective to reduce the number of deaths from this cause. Floyd County had a 1995 age-adjusted death rate that was approximately 39% over the projected objective, while Giles County had a 1995 age-adjusted death rate that was 45% over the objective.

Overall, the 1995 age-adjusted death rate for cerebrovascular disease in the New River Health District was slightly above the Year 2000 Objective. However, the counties of Giles, Montgomery, and Pulaski had 1995 age-adjusted death rates that were at least 65% over the projected Year 2000 Objective.

The New River Health District was also fortunate to have had a 1995 age-adjusted death rate for Chronic Obstuctive Pulmonary Disease (COPD) that was significantly lower than the Year 2000 Objective. Radford City was the only locality that had a 1995 age-adjusted death rate that was higher than the projected objective. For 1995, Radford City had an age-adjusted death rate that was 20% over the projected objective.